



KEY ADVANTAGES

- **Full bi-directional control and monitoring via true wireless IP mesh link**
- **Low latency UHD/HD Resolution encoding**
- **Single input Interface supporting 3G HD-SDI, 6G and 12G**
- **Built-in 2-way talkback**
- **Bi-directional Camera Control with true IP and Cyanview capability**
- **Supports Anton Bauer and V Lock battery plates**
- **Support for UHD/HD HDR and also Timecode (film industry) signal insertion**
- **Optional return video path**
- **IP Streaming**

Quartz TX

The DBS Quartz TX raises the feature set of 'clip-on' camera back transmitters to a new level

By combining DBS class-leading HEVC encoding and COFDM modulation for the main vision path, with a bi-directional wireless-IP network using DTC's renowned IP Mesh technology, the Quartz TX delivers unparalleled functionality. It provides a highly robust wireless video link with a private wireless IP connection for monitoring and control plus communications with the camera operator.

Other benefits include bi-directional IP or Cyanview camera control; integrated 2-way talkback and an optional return vision channel. Whilst the main vision path still requires a discrete COFDM RF channel, the IP mesh operates on a single channel shared with other Quartz assets at the event. Rigging times are minimised as gaps in coverage can easily be covered by deploying plug-and-play repeater units.

The Quartz Cameraback TX is equipped with a single video input capable of 3G HD-SDI, 6G and 12G, thus allowing video formats to UHD. Back to back V Lock or Anton Bauer battery plates facilitate pass-through power whilst an additional external power connector is provided at the base. Analogue stereo audio inputs are supported in addition to camera control and Tally interfaces. An ASI transport stream interface is provided to facilitate easy connection to other modulation systems. Quartz utilizes a high quality, low-latency H.265 encoder capable of UHD and HD formats in 10bit 4:2:2 with automatic HDR support. Up to 8x stereo pairs of audio in either MPEG-1 layer 1, or PCM format (4 stereo pairs in AAC-LC) via embedded SDI and 2x analogue audio inputs with P48 power are included for direct microphone connection. All settings are accessible through a single colour panel on the side or using the web browser interface via the IP Mesh connection, or direct.

Connectors

RF Out	N-Type Female
RF In/Out	2x SMA Female
Video In	BNC Female 3G/6G/12G
Return Video Out	HD-BNC Female
ASI Out	BNC Female
Analogue audio in	Lemo 0B 5-way female, twin key
Power Input	Lemo 0B 4-way female
Auxiliary Data	Lemo 0B 9-way female
Camera CTL	2x Hirose HR10 6-way female
Talkback Audio in/out	3.5mm Stereo Jack
Ethernet	2x RJ45
USB 1	USB A
USB 2	Lemo 0B 8-way Female, twin key

COFDM RF

Frequency Bands	2-2.9GHz, 5.5-6GHz, 7.0-7.5GHz (others on request)
Tuning Step Size	250kHz
O/P Power	100mW
Modulation	Modulation Modes DVBT, Dual Pedestal, UMVL and ISDB-T DVB-T Bandwidth 8MHz, 7MHz and 6MHz modes
DVB-T Guard	1/32, 1/16, 1/8, 1/4
DVB-T FEC	1/2, 2/3, 3/4, 5/6, 7/8
DVB-T Modulation	QPSK, 16QAM, 64QAM
DVB-T Bit-rates	3.6Mbps to 32Mbps

Video/Audio

Video Coding	H.265
H.265 4K UHD	2160p 23.98/24/25/29.97/30/50/ 59.94/60 HD. 4:2:2/4:2:0, 8/10-bit 720p 50/59.94/60 1080i 50/59.94/60 1080p 23.98/24/25/29.97/30/50/ 59.94/60 1080psf 23.98/24/25/29.97/30
HDR/WGC	We support Rec. ITU-R BT.2100-2 (PQ and HLG) Rec. ITU-R BT.2020
Audio Format	Embedded Encoder MPEG-1 Layer 1, MPEG-1 Layer 2, AAC-LC, Linear PCM Quantity 4 pairs (8 pair if MPEG or Linear PCM) Analogue 1 pair line / mic level Power
	Out P48 phantom power
IP Streaming	Format Unicast / Multicast / UDP / RTP / SRT Bitrate 25Mb/s maximum

IP Mesh

RF Frequency Bands	1.14-1.50GHz, 1.67-2.35GHz, 1.98-2.70GHz, 4.40-5.00GHz, 5.50-6.00GHz
Power	100mW (+20dBm) per output, 200mW total
Power step	0.25dB incremental control
Tuning range Frequency	variant dependent
Tuning step	125kHz
RF Bandwidth	1.25/2.5/5/10/20MHz



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